## CLAIMS

1. The compound of the general formula (1):

5 wherein

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W and X, W and Z, X and Y or Y and Z are N and the other two are  $CR^8$ ;

 $R^8$  is H, halo,  $C_{1-4}$  alkyl,  $C_{1-4}$  alkoxy or halo  $(C_{1-4})$  alkyl;

R and  $R^2$  are independently H, halo,  $C_{1-8}$  alkyl,  $C_{1-8}$  alkoxy,  $C_{1-8}$  alkylthio,  $C_{2-8}$  alkenyl,  $C_{2-8}$  alkynyl, cyano or  $NR^3R^4$ , provided that at least one of R and  $R^2$  is  $NR^3R^4$ ;

R<sup>1</sup> is halo, C<sub>1-8</sub> alkyl, C<sub>2-8</sub> alkenyl, C<sub>2-8</sub> alkynyl, C<sub>3-8</sub> cycloalkyl, C<sub>3-8</sub> cycloalkyl(C<sub>1-6</sub>)alkyl, C<sub>1-8</sub> alkoxy, C<sub>1-8</sub> alkylthio, aryl, aryloxy, arylthio, heteroaryl, heteroaryloxy, heteroarylthio, aryl(C<sub>1-4</sub>)alkyl, aryl(C<sub>1-4</sub>)alkoxy, heteroaryl(C<sub>1-4</sub>)alkyl, heteroaryl(C<sub>1-4</sub>)alkoxy, aryl(C<sub>1-4</sub>)-alkylthio, heteroaryl(C<sub>1-4</sub>)alkylthio, morpholino, piperidino or pyrrolidino;

R<sup>3</sup> and R<sup>4</sup> are independently H, C<sub>1-8</sub> alkyl, C<sub>2-8</sub> alkenyl, C<sub>2-8</sub> alkynyl, aryl, aryl(C<sub>1-8</sub>)alkyl,

15  $C_{3-8}$  cycloalkyl,  $C_{3-8}$  cycloalkyl( $C_{1-6}$ )alkyl, heteroaryl, heteroaryl( $C_{1-8}$ )alkyl,  $NR^5R^6$ , provided that not both  $R^3$  and  $R^4$  are H or  $NR^5R^6$ , or

 $R^3$  and  $R^4$  together form a  $C_{3-7}$  alkylene or  $C_{3-7}$  alkenylene chain optionally substituted with one or more  $C_{1-4}$  alkyl or  $C_{1-4}$  alkoxy groups, or,

together with the nitrogen atom to which they are attached, R<sup>3</sup> and R<sup>4</sup> form a morpholine,

thiomorpholine, thiomorpholine S-oxide or thiomorpholine S-dioxide ring or a piperazine or piperazine N- $(C_{1-4})$ alkyl (especially N-methyl) ring; and

 $R^5$  and  $R^6$  are independently H,  $C_{1-8}$  alkyl,  $C_{2-8}$  alkenyl,  $C_{2-8}$  alkynyl, aryl, aryl( $C_{1-8}$ )alkyl,  $C_{3-8}$  cycloalkyl,  $C_{3-8}$  cycloalkyl,  $C_{3-8}$  cycloalkyl, heteroaryl or heteroaryl( $C_{1-8}$ )alkyl;

any of the foregoing alkyl, alkenyl, alkynyl or cycloalkyl groups or moieties (other than for

R<sup>8</sup>) being optionally substituted with halogen, cyano, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkylcarbonyl, C<sub>1-6</sub> alkoxycarbonyl, C<sub>1-6</sub> haloalkoxy, C<sub>1-6</sub> alkylthio, tri(C<sub>1-4</sub>)alkylsilyl, C<sub>1-6</sub> alkylamino or C<sub>1-6</sub> dialkylamino,

any of the foregoing morpholine, thiomorpholine, piperidine, piperazine and pyrrolidine rings being optionally substituted with  $C_{1-4}$  alkyl (especially methyl), and

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any of the foregoing aryl or heteroaryl groups or moieties being optionally substituted with one or more substituents selected from halo, hydroxy, mercapto, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>1-6</sub> alkoxy, C<sub>2-6</sub> alkenyloxy, C<sub>2-6</sub> alkynyloxy, halo(C<sub>1-6</sub>)alkyl, halo(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkylthio, halo(C<sub>1-6</sub>)alkylthio, hydroxy(C<sub>1-6</sub>)alkyl, C<sub>1-4</sub> alkoxy(C<sub>1-6</sub>)alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>3-6</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, phenoxy, benzyloxy, benzoyloxy, cyano, isocyano, thiocyanato, isothiocyanato, nitro, -NR"R"", -NHCOR", -NHCONR"R"", -CONR"R"", -SO<sub>2</sub>R", -OSO<sub>2</sub>R", -COR", -CR"'=NR"" or -N=CR"'R"", in which R" and R"" are independently hydrogen, C<sub>1-4</sub> alkyl, halo-(C<sub>1-4</sub>)alkyl, C<sub>1-4</sub> alkoxy, halo(C<sub>1-4</sub>)alkoxy, C<sub>1-4</sub> alkylthio, C<sub>3-6</sub> cycloalkyl, C<sub>3-6</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, phenyl or benzyl, the phenyl and benzyl groups being optionally substituted with halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy.

- 2. A compound according to claim 1 wherein W and Z are N and X and Y are CH.
- 15 3. A compound according to claim 1 or 2 wherein R<sup>2</sup> is NR<sup>3</sup>R<sup>4</sup>.
  - 4. A compound according to claim 3 wherein R is halo.
- 5. A compound according to any one of the preceding claims wherein 20  $R^3$  is  $C_{1-8}$  alkyl, halo  $(C_{1-8})$  alkyl, hydroxy  $(C_{1-8})$  alkyl,  $C_{1-4}$  alkoxy  $(C_{1-8})$  alkyl,  $C_{1-4}$ alkoxyhalo( $C_{1-8}$ )alkyl, tri( $C_{1-4}$ )alkylsilyl( $C_{1-6}$ )alkyl,  $C_{1-4}$ -alkylcarbonyl( $C_{1-8}$ )alkyl alkylcarbonylhalo(C<sub>1-8</sub>)alkyl, phenyl(1-4)alkyl, C<sub>2-8</sub> alkenyl, halo(C<sub>2-8</sub>)alkenyl, C<sub>2-8</sub> alkynyl, C<sub>3-8</sub> cycloalkyl optionally substituted with chloro, fluoro or methyl, C<sub>3-8</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, phenylamino, piperidino or morpholino, the phenyl ring of 25 phenylalkyl or phenylamino being optionally substituted with one, two or three substituents selected from halo, C1-4 alkyl, halo(C1-4)alkyl, C1-4 alkoxy and halo- $(C_{1-4})$ alkoxy; and R<sup>4</sup> is H, C<sub>1-4</sub> alkyl, halo(C<sub>1-4</sub>)alkyl or amino, or R<sup>3</sup> and R<sup>4</sup> together form a C<sub>3-7</sub> alkylene or alkenylene chain optionally substituted 30 with methyl, or,

together with the nitrogen atom to which they are attached, R<sup>3</sup> and R<sup>4</sup> form a

morpholine, thiomorpholine S-oxide or thiomorpholine S-dioxide

ring or a piperazine or piperazine N-( $C_{1-4}$ )alkyl (especially N-methyl) ring, in which the morpholine or piperazine rings are optionally substituted with methyl.

- 6. A compound according to any one of the preceding claims wherein

  R¹ is phenyl optionally substituted with from one to five halogen atoms or with from one to three substituents selected from halo, C₁-4 alkyl, halo(C₁-4)alkyl, C₁-4 alkoxy or halo(C₁-4)alkoxy, pyridyl optionally substituted with from one to four halogen atoms or with from one to three substituents selected from halo, C₁-4 alkyl, halo(C₁-4)alkyl, C₁-4 alkoxy or halo(C₁-4)alkoxy, 2- or 3-thienyl optionally substituted with from one to three halogen atoms or with from one to three substituents selected from halo, C₁-4 alkyl, halo(C₁-4)alkyl, C₁-4 alkoxy or halo(C₁-4)alkoxy, or piperidino or morpholino both optionally substituted with one or two methyl groups.
- 7. A compound according to claim 6 wherein R<sup>1</sup> is 2,6-difluorophenyl, 2-fluoro-6-chlorophenyl, 2,5,6-trifluorophenyl, 2,4,6-trifluorophenyl, 2,6-difluoro-4-methoxy-phenyl or pentafluorophenyl.
- 8. A compound according to claim 1 wherein
  W and X, W and Z, X and Y or Y and Z are N and the other two are CR<sup>8</sup>;
  R<sup>8</sup> is H, halo, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy or halo(C<sub>1-4</sub>)alkyl;
  one of R and R<sup>2</sup> (preferably R<sup>2</sup>) is NR<sup>3</sup>R<sup>4</sup> and the other is halo;
  R<sup>1</sup> is halo, C<sub>1-8</sub> alkyl, C<sub>2-8</sub> alkenyl, C<sub>2-8</sub> alkynyl, C<sub>3-8</sub> cycloalkyl, C<sub>3-8</sub> cycloalkyl(C<sub>1-6</sub>)-alkyl, C<sub>1-8</sub> alkoxy, C<sub>1-8</sub> alkylthio, aryl, aryloxy, arylthio, heteroaryl, heteroaryloxy, heteroarylthio, aryl(C<sub>1-4</sub>)alkyl, aryl(C<sub>1-4</sub>)alkoxy, heteroaryl(C<sub>1-4</sub>)alkyl, heteroaryl-(C<sub>1-4</sub>)alkoxy, aryl(C<sub>1-4</sub>)alkylthio, heteroaryl(C<sub>1-4</sub>)alkylthio, morpholino, piperidino or pyrrolidino;
  R<sup>3</sup> and R<sup>4</sup> are independently H, C<sub>1-8</sub> alkyl, C<sub>2-8</sub> alkenyl, C<sub>2-8</sub> alkynyl, aryl, aryl(C<sub>1-8</sub>)-alkyl, C<sub>3-8</sub> cycloalkyl, C<sub>3-8</sub> cycloalkyl, C<sub>1-6</sub>)alkyl, heteroaryl, heteroaryl(C<sub>1-8</sub>)alkyl,
- R<sup>3</sup> and R<sup>4</sup> together form a C<sub>3-7</sub> alkylene or C<sub>3-7</sub> alkenylene chain optionally substituted with one or more C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy groups, or, together with the nitrogen atom to which they are attached, R<sup>3</sup> and R<sup>4</sup> form a morpholine, thiomorpholine, thiomorpholine S-oxide or thiomorpholine S-dioxide

NR<sup>5</sup>R<sup>6</sup>, provided that not both R<sup>3</sup> and R<sup>4</sup> are H or NR<sup>5</sup>R<sup>6</sup>, or

ring or a piperazine or piperazine N-(C<sub>1-4</sub>)alkyl (especially N-methyl) ring; and R<sup>5</sup> and R<sup>6</sup> are independently H, C<sub>1-8</sub> alkyl, C<sub>2-8</sub> alkenyl, C<sub>2-8</sub> alkynyl, aryl, aryl(C<sub>1-8</sub>)alkyl,  $C_{3-8}$  cycloalkyl,  $C_{3-8}$  cycloalkyl( $C_{1-6}$ )alkyl, heteroaryl or heteroaryl( $C_{1-8}$ )alkyl; any of the foregoing alkyl, alkenyl, alkynyl or cycloalkyl groups or moieties (other than for R<sup>8</sup>) being optionally substituted with halogen, cyano, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> 5 alkylcarbonyl,  $C_{1-6}$  alkoxycarbonyl,  $C_{1-6}$  haloalkoxy,  $C_{1-6}$  alkylthio, tri $(C_{1-4})$  alkylsilyl, C<sub>1-6</sub> alkylamino or C<sub>1-6</sub> dialkylamino, any of the foregoing morpholine, thiomorpholine, piperidine, piperazine and pyrrolidine rings being optionally substituted with C<sub>1-4</sub> alkyl (especially methyl), and 10 any of the aryl, heteroaryl, aryloxy or heteroaryl groups being optionally substituted with one or more substituents selected from halo, hydroxy, mercapto,  $C_{1-6}$  alkyl,  $C_{2-6}$ alkenyl, C<sub>2-6</sub> alkynyl, C<sub>1-6</sub> alkoxy, C<sub>2-6</sub> alkenyloxy, C<sub>2-6</sub> alkynyloxy, halo(C<sub>1-6</sub>)alkyl, halo( $C_{1-6}$ )alkoxy,  $C_{1-6}$  alkylthio, halo( $C_{1-6}$ )alkylthio, hydroxy( $C_{1-6}$ )alkyl,  $C_{1-4}$ alkoxy( $C_{1-6}$ )alkyl,  $C_{3-6}$  cycloalkyl,  $C_{3-6}$  cycloalkyl( $C_{1-4}$ )alkyl, phenoxy, benzyloxy, 15 benzoyloxy, cyano, isocyano, thiocyanato, isothiocyanato, nitro, -NR"'R"", -NHCOR", -NHCONR"R"", -CONR"R"", -SO<sub>2</sub>R", -OSO<sub>2</sub>R", -COR", -CR""=NR"" or -N=CR"R", in which R" and R" are independently hydrogen, C<sub>1-4</sub> alkyl, halo-(C<sub>1-4</sub>)alkyl, C<sub>1-4</sub> alkoxy, halo(C<sub>1-4</sub>)alkoxy, C<sub>1-4</sub> alkylthio, C<sub>3-6</sub> cycloalkyl, C<sub>3-6</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, phenyl or benzyl, the phenyl and benzyl groups being 20 optionally substituted with halogen,  $C_{1-4}$  alkyl or  $C_{1-4}$  alkoxy.

9. A compound according to claim 1 wherein
W and X, W and Z, X and Y or Y and Z are N and the other two are CR<sup>8</sup>;
R<sup>8</sup> is H, halo, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy or halo(C<sub>1-4</sub>)alkyl;
25 one of R and R<sup>2</sup> (preferably R<sup>2</sup>) is NR<sup>3</sup>R<sup>4</sup> and the other is halo;
R<sup>1</sup> is halo, C<sub>1-8</sub> alkyl, C<sub>2-8</sub> alkenyl, C<sub>2-8</sub> alkynyl, C<sub>3-8</sub> cycloalkyl, C<sub>3-8</sub> cycloalkyl(C<sub>1-6</sub>)-alkyl, C<sub>1-8</sub> alkoxy, C<sub>1-8</sub> alkylthio, aryl, aryloxy, arylthio, heteroaryl, heteroaryloxy, heteroarylthio, aryl(C<sub>1-4</sub>)alkyl, aryl(C<sub>1-4</sub>)alkoxy, heteroaryl(C<sub>1-4</sub>)alkyl, heteroaryl-(C<sub>1-4</sub>)alkoxy, aryl(C<sub>1-4</sub>)alkylthio, heteroaryl(C<sub>1-4</sub>)alkylthio, morpholino, piperidino or pyrrolidino;
R<sup>3</sup> is C<sub>1-4</sub> alkyl, halo(C<sub>1-4</sub>)alkyl, C<sub>2-4</sub> alkenyl, C<sub>3-6</sub> cycloalkyl, C<sub>3-6</sub> cycloalkyl(C<sub>1-4</sub>)-

alkyl or phenylamino in which the phenyl ring is optionally substituted with one, two

or three substituents selected from halo, C<sub>1-4</sub> alkyl, halo(C<sub>1-4</sub>)alkyl, C<sub>1-4</sub> alkoxy and

halo(C<sub>1-4</sub>)alkoxy; and R<sup>4</sup> is H, C<sub>1-4</sub> alkyl or amino, or R<sup>3</sup> and R<sup>4</sup> together form a C<sub>4-6</sub> alkylene chain optionally substituted with C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy, or, together with the nitrogen atom to which they are attached, R<sup>3</sup> and R<sup>4</sup> form a 5 morpholine, thiomorpholine, thiomorpholine S-oxide or thiomorpholine S-dioxide ring or a piperazine or piperazine N-(C<sub>1-4</sub>)alkyl (especially N-methyl) ring; any of the alkyl, alkenyl, alkynyl or cycloalkyl groups or moieties (other than for R<sup>8</sup>) being optionally substituted with halogen, cyano, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkylcarbonyl, C<sub>1-6</sub> alkoxycarbonyl, C<sub>1-6</sub> haloalkoxy, C<sub>1-6</sub> alkylthio, tri(C<sub>1-4</sub>)alkylsilyl, C<sub>1-6</sub> alkylamino or 10 C<sub>1-6</sub> dialkylamino, any of the foregoing morpholine, thiomorpholine, piperidine, piperazine and pyrrolidine rings being optionally substituted with C<sub>1-4</sub> alkyl (especially methyl), and any of the aryl or heteroaryl groups or moieties being optionally substituted with one or more substituents selected from halo, hydroxy, mercapto, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, 15 C<sub>2-6</sub> alkynyl, C<sub>1-6</sub> alkoxy, C<sub>2-6</sub> alkenyloxy, C<sub>2-6</sub> alkynyloxy, halo(C<sub>1-6</sub>)alkyl, halo- $(C_{1-6})$ alkoxy,  $C_{1-6}$  alkylthio, halo $(C_{1-6})$ alkylthio, hydroxy $(C_{1-6})$ alkyl,  $C_{1-4}$  alkoxy $(C_{1-6})$ alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>3-6</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, phenoxy, benzyloxy, benzoyloxy, cyano, isocyano, thiocyanato, isothiocyanato, nitro, -NR"R"", -NHCOR", -NHCONR"R"", -CONR"R"", -SO<sub>2</sub>R", -OSO<sub>2</sub>R", -COR", -CR"=NR"" or -N=CR"'R"", in which R" and R"" are independently hydrogen, C<sub>1-4</sub> alkyl, halo-20 (C<sub>1-4</sub>)alkyl, C<sub>1-4</sub> alkoxy, halo(C<sub>1-4</sub>)alkoxy, C<sub>1-4</sub> alkylthio, C<sub>3-6</sub> cycloalkyl, C<sub>3-6</sub>

25 10. A compound according to claim 1 wherein
W and X, W and Z, X and Y or Y and Z are N and the other two are CR<sup>8</sup>;
R<sup>8</sup> is H, halo, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy or halo(C<sub>1-4</sub>)alkyl;
R and R<sup>2</sup> are independently H, halo, C<sub>1-8</sub> alkyl, C<sub>1-8</sub> alkoxy, C<sub>1-8</sub> alkylthio, C<sub>2-8</sub> alkenyl, C<sub>2-8</sub> alkynyl, cyano or NR<sup>3</sup>R<sup>4</sup>, provided that at least one of R and R<sup>2</sup>
30 (preferably R<sup>2</sup>) is NR<sup>3</sup>R<sup>4</sup>;
R<sup>1</sup> is optionally substituted phenyl;

optionally substituted with halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy.

cycloalkyl(C<sub>1-4</sub>)alkyl, phenyl or benzyl, the phenyl and benzyl groups being

 $R^3$  and  $R^4$  are independently H,  $C_{1-8}$  alkyl,  $C_{2-8}$  alkenyl,  $C_{2-8}$  alkynyl, aryl, aryl( $C_{1-8}$ )-alkyl,  $C_{3-8}$  cycloalkyl,  $C_{3-8}$  cycloalkyl, heteroaryl, heteroaryl( $C_{1-8}$ )alkyl,

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NR<sup>5</sup>R<sup>6</sup>, provided that not both R<sup>3</sup> and R<sup>4</sup> are H or NR<sup>5</sup>R<sup>6</sup>, or R<sup>3</sup> and R<sup>4</sup> together form a C<sub>3-7</sub> alkylene or C<sub>3-7</sub> alkenylene chain optionally substituted with one or more  $C_{1-4}$  alkyl or  $C_{1-4}$  alkoxy groups, or, together with the nitrogen atom to which they are attached, R<sup>3</sup> and R<sup>4</sup> form a morpholine, thiomorpholine S-oxide or thiomorpholine S-dioxide 5 ring or a piperazine or piperazine N-(C<sub>1-4</sub>)alkyl (especially N-methyl) ring; and  $R^5$  and  $R^6$  are independently H,  $C_{1-8}$  alkyl,  $C_{2-8}$  alkenyl,  $C_{2-8}$  alkynyl, aryl, aryl( $C_{1-8}$ )alkyl, C<sub>3-8</sub> cycloalkyl, C<sub>3-8</sub> cycloalkyl(C<sub>1-6</sub>)alkyl, heteroaryl or heteroaryl(C<sub>1-8</sub>)alkyl; any of the alkyl, alkenyl, alkynyl or cycloalkyl groups or moieties (other than for R<sup>8</sup>) 10 being optionally substituted with halogen, cyano, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkylcarbonyl, C<sub>1-6</sub> alkoxycarbonyl, C<sub>1-6</sub> haloalkoxy, C<sub>1-6</sub> alkylthio, tri(C<sub>1-4</sub>)alkylsilyl, C<sub>1-6</sub> alkylamino or C<sub>1-6</sub> dialkylamino, any of the foregoing morpholine, thiomorpholine, piperidine, piperazine and pyrrolidine rings being optionally substituted with C<sub>1-4</sub> alkyl (especially methyl), and 15 any of the aryl or heteroaryl groups or moieties, including the phenyl group of R<sup>1</sup>. being optionally substituted with one or more substituents selected from halo, hydroxy, mercapto, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>1-6</sub> alkoxy, C<sub>2-6</sub> alkenyloxy,  $C_{2-6}$  alkynyloxy, halo( $C_{1-6}$ )alkyl, halo( $C_{1-6}$ )alkoxy,  $C_{1-6}$  alkylthio, halo( $C_{1-6}$ )alkylthio, hydroxy( $C_{1-6}$ )alkyl,  $C_{1-4}$  alkoxy( $C_{1-6}$ )alkyl,  $C_{3-6}$  cycloalkyl,  $C_{3-6}$  cycloalkyl( $C_{1-4}$ )alkyl, 20 phenoxy, benzyloxy, benzoyloxy, cyano, isocyano, thiocyanato, isothiocyanato, nitro, -NR""R"", -NHCOR", -NHCONR""R"", -CONR""R"", -SO<sub>2</sub>R", -OSO<sub>2</sub>R", -COR", -CR"=NR"" or -N=CR""R"", in which R" and R"" are independently hydrogen, C1-4 alkyl, halo(C<sub>1-4</sub>)alkyl, C<sub>1-4</sub> alkoxy, halo(C<sub>1-4</sub>)alkoxy, C<sub>1-4</sub> alkylthio, C<sub>3-6</sub> cycloalkyl, C<sub>3-6</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, phenyl or benzyl, the phenyl and benzyl groups being optionally substituted with halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy. 25

A compound according to claim 1 wherein
 W and X, W and Z, X and Y or Y and Z are N and the other two are CR<sup>8</sup>;
 R<sup>8</sup> is H, halo, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy or halo(C<sub>1-4</sub>)alkyl;

R is H, halo, C<sub>1-4</sub> alkyl), C<sub>1-4</sub> alkoxy or cyano;

R<sup>1</sup> is phenyl optionally substituted with from one to five halogen atoms or with from one to three substituents selected from halo, C<sub>1-4</sub> alkyl, halo(C<sub>1-4</sub>)alkyl, C<sub>1-4</sub> alkoxy or halo(C<sub>1-4</sub>)alkoxy, pyridyl optionally substituted with from one to four halogen atoms

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or with from one to three substituents selected from halo,  $C_{1-4}$  alkyl, halo( $C_{1-4}$ )alkyl,  $C_{1-4}$  alkoxy or halo( $C_{1-4}$ )alkoxy, 2- or 3-thienyl optionally substituted with from one to three halogen atoms or with from one to three substituents selected from halo,  $C_{1-4}$  alkyl, halo( $C_{1-4}$ )alkyl,  $C_{1-4}$  alkoxy or halo( $C_{1-4}$ )alkoxy, or piperidino or morpholino both optionally substituted with one or two methyl groups;

 $R^2$  is  $NR^3R^4$ ;

 $R^3$  is  $C_{1-8}$  alkyl, halo( $C_{1-8}$ )alkyl, hydroxy( $C_{1-8}$ )alkyl,  $C_{1-4}$  alkoxy( $C_{1-8}$ )alkyl,  $C_{1-4}$  alkoxyhalo( $C_{1-8}$ )alkyl, tri( $C_{1-4}$ )alkylsilyl( $C_{1-6}$ )alkyl,  $C_{1-4}$  alkylcarbonyl( $C_{1-8}$ )alkyl,  $C_{1-4}$  alkylcarbonylhalo( $C_{1-8}$ )alkyl, phenyl( $C_{1-4}$ )alkyl,  $C_{2-8}$  alkenyl, halo( $C_{2-8}$ )alkenyl,  $C_{2-8}$  alkynyl,  $C_{3-8}$  cycloalkyl optionally substituted with chloro, fluoro or methyl,  $C_{3-8}$  cycloalkyl( $C_{1-4}$ )alkyl, phenylamino, piperidino or morpholino, the phenyl ring of phenylalkyl or phenylamino being optionally substituted with one, two or three substituents selected from halo,  $C_{1-4}$  alkyl, halo( $C_{1-4}$ )alkyl,  $C_{1-4}$  alkoxy and halo-( $C_{1-4}$ )alkoxy; and

R<sup>4</sup> is H, C<sub>1-4</sub> alkyl, halo(C<sub>1-4</sub>)alkyl or amino, or
R<sup>3</sup> and R<sup>4</sup> together form a C<sub>3-7</sub> alkylene or C<sub>3-7</sub> alkenylene chain optionally substituted with methyl, or,
together with the nitrogen atom to which they are attached, R<sup>3</sup> and R<sup>4</sup> form a morpholine, thiomorpholine, thiomorpholine S-oxide or thiomorpholine S-dioxide ring or a piperazine or piperazine N-(C<sub>1-4</sub>)alkyl (especially N-methyl) ring, in which the morpholine or piperazine rings are optionally substituted with methyl

12. A compound according to claim 1 wherein

W and X, W and Z, X and Y or Y and Z are N and the other two are CR8;

 $R^8$  is H, halo,  $C_{1-4}$  alkyl,  $C_{1-4}$  alkoxy or halo( $C_{1-4}$ )alkyl;

R is halo;

 $R^1$  is phenyl optionally substituted with from one to five halogen atoms or with from one to three substituents selected from halo,  $C_{1-4}$  alkyl, halo( $C_{1-4}$ )alkyl,  $C_{1-4}$  alkoxy or halo( $C_{1-4}$ )alkoxy;

 $R^2$  is  $NR^3R^4$ ;

 $R^3$  is  $C_{1-4}$  alkyl, halo( $C_{1-4}$ )alkyl,  $C_{2-4}$  alkenyl,  $C_{3-6}$  cycloalkyl,  $C_{3-6}$  cycloalkyl( $C_{1-4}$ )-alkyl or phenylamino in which the phenyl ring is optionally substituted with one, two or three substituents selected from halo,  $C_{1-4}$  alkyl, halo( $C_{1-4}$ )alkyl,  $C_{1-4}$  alkoxy and

halo(C<sub>1-4</sub>)alkoxy; and

R<sup>4</sup> is H, C<sub>1-4</sub> alkyl or amino, or R<sup>3</sup> and R<sup>4</sup> together form a C<sub>4-6</sub> alkylene chain optionally substituted with methyl, or, together with the nitrogen atom to which they are attached, R<sup>3</sup> and R<sup>4</sup> form a morpholine ring.

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13. A process for preparing a compound of the general formula (1) according to claim 1 wherein one of R and R<sup>2</sup> is chloro or fluoro and the other is NR<sup>3</sup>R<sup>4</sup> and W, X, Y, Z, R<sup>1</sup>, R<sup>3</sup> and R<sup>4</sup> are as defined in claim 1, which comprises reacting an amine of the general formula NR<sup>3</sup>R<sup>4</sup> with a compound of the general formula (6) or (13):

$$X \xrightarrow{W} \xrightarrow{CI} \xrightarrow{R^1} \xrightarrow{W} \xrightarrow{F} \xrightarrow{R^1} \xrightarrow{(13)} \xrightarrow{F}$$

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The intermediate chemicals having the general formulae (4), (5), (6) and (13): 14.

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wherein W, X, Y, Z and  $R^1$  are as defined in claim 1 and  $R^7$  is  $C_{1-4}$  alkyl.

- 15. A plant fungicidal composition comprising a fungicidally effective amount of a compound as defined in claim 1 and a suitable carrier or diluent therefor.
- 20 16. A method of combating or controlling phytopathogenic fungi which comprises

applying to a plant, to a seed of a plant, to the locus of the plant or seed or to soil or to any other plant growth medium, a fungicidally effective amount of a compound according to claim 1 or a composition according to claim 15.

## **AMENDED CLAIMS**

[Received by the International Bureau on 13 May 2004 (13.05.04): original claim 14 amended; remaining claims unchanged; (1 page)]

halo(C1-4)alkoxy; and

R<sup>4</sup> is H, C<sub>1-4</sub> alkyl or amino, or R<sup>3</sup> and R<sup>4</sup> together form a C<sub>4-6</sub> alkylene chain optionally substituted with methyl, or, together with the nitrogen atom to which they are attached, R<sup>3</sup> and R<sup>4</sup> form a morpholine ring.

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13. A process for preparing a compound of the general formula (1) according to claim 1 wherein one of R and R<sup>2</sup> is chloro or fluoro and the other is NR<sup>3</sup>R<sup>4</sup> and W, X, Y, Z, R<sup>1</sup>, R<sup>3</sup> and R<sup>4</sup> are as defined in claim 1, which comprises reacting an amine of the general formula NR<sup>3</sup>R<sup>4</sup> with a compound of the general formula (6) or (13):

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14. The intermediate chemicals having the general formulae (4), (5), (6) and (13):

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wherein W, X, Y, Z and  $R^1$  are as defined in claim1 and  $R^7$  is  $C_{14}$  alkyl, other than the compound of formula (6), wherein X and Y are N, W and Z are C-Cl and  $R^1$  is Cl.

. .

15. A plant fungicial composition comprising a fungicidally effective amount of a compound as defined in claim 1 and a suitable carrier or diluent therefor,

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16. A method of combating or controlling phytopathogenic fungi which comprises applying to a plant, to a seed of a plant, to the locus of the plant or seed or to soil or to any other plant growth medium, a fungicidally effective amount of a compound according to claim 1 or a composition according to claim 15.

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